

Claims 1-27 are currently pending in the application. In response to the Restriction Requirement dated June 24, 2004 requiring election of one of two Groups of claims, e.g., Group I, including claims 25-26 or Group II, including claims 1-24 and 27, Applicants
5 elected Group II, namely, claims 1-24 and 27, with traverse.

In the present Office Action, the Examiner is further requiring election of one of the following four species: Embodiment 1, wherein etching of the antireflective material is accompanied by plasma polymer deposition; Embodiment 2, wherein the antireflective material comprises one or more inorganic moieties; Embodiment 3, wherein the antireflective material
10 has the structural formula M:carbon:hydrogen:X, wherein M comprises a metal and X comprises an inorganic element; and Embodiment 4, wherein the antireflective material has the structural formula silicon:carbon:hydrogen:oxygen.

Applicants respectfully traverse the species election requirement.

First, the Examiner has issued the species election requirement on the alleged
15 basis that “[the] materials for forming the antireflective material are different.” See Office Action, page 2, 6th paragraph. However, Embodiment 1, as identified by the Examiner, is not directed to a material for forming an antireflective material at all, but rather to techniques for accompanying the etching of the antireflective material with plasma polymer deposition to, e.g., reduce at least one critical dimension of one or more features patterned in a semiconductor
20 device. See, for example, Specification, beginning on page 7, line 25. Clarification of the species election requirement regarding this Embodiment is respectfully requested.

Further, M.P.E.P. §806.04(a) clearly states that a reasonable number of species may be claimed in one application. Further, M.P.E.P. §803 states that “[i]f the search and examination of an entire application can be made without serious burden, the examiner must
25 examine it on the merits, even though it includes claims to independent or distinct inventions.” Since each of the Embodiments, except for Embodiment 1, see argument above, is directed to exemplary antireflective material compositions, Applicants respectfully submit that the search and examination of all of the claims associated with these Embodiments would not present a serious burden.

Notwithstanding the traversal, Applicants provisionally elect Embodiment 3 wherein the antireflective material has the structural formula M:carbon:hydrogen:X, wherein M comprises a metal and X comprises an inorganic element.

The Examiner further required a listing of all claims readable on the elected species. Applicants respectfully submit that, arguably, all of the pending claims, i.e., claims 1-24 and 27, are readable on Embodiment 3. Namely, “[c]laims to be restricted to different species must be mutually exclusive. The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first.” M.P.E.P. §806.04(f).

For example, Embodiment 3 is directed to the antireflective material having the structural formula M:carbon:hydrogen:X, wherein M comprises a metal and X comprises an inorganic element. Dependent claim 4 similarly recites that the antireflective material has the structural formula M:carbon:hydrogen:X, wherein M comprises a metal and X comprises an inorganic element. Dependent claim 5 recites that M, e.g., of claim 4, can comprise “a metal selected from the group consisting of silicon, titanium, germanium, iron, boron, tin and combinations comprising at least one of the foregoing metals.” (emphasis added) Dependent claim 6 recites that X, e.g., of claim 4, can comprise “an inorganic element selected from the group consisting of oxygen, hydrogen, nitrogen and combinations comprising at least one of the foregoing inorganic elements.” (emphasis added) Dependent claim 7 recites (as does Embodiment 4 highlighted by the Examiner) that the antireflective material has the structural formula silicon:carbon:hydrogen:oxygen.

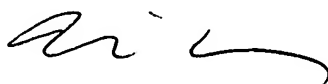
As such, none of claims 4-7, for example, recite characteristics that are mutually exclusive of one another. Therefore, as stated above, Applicants submit that all of the pending claims, i.e., claims 1-24 and 27, are readable on Embodiment 3.

Further, Applicants point out that once a generic claim is allowed, “all of the claims drawn to species in addition to the elected species which include all the limitations of the generic claim will . . . be . . . allowable in view of the allowance of the generic claim.” See M.P.E.P. §806.04(d).

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,



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Michael J. Chang
Attorney for Applicant(s)
Reg. No. 46,611
Ryan, Mason & Lewis, LLP
1300 Post Road, Suite 205
Fairfield, CT 06430
(203) 255-6560